Price as a Market Device:
Cotton Trading in Izmir Mercantile Exchange

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Introduction

A mysterious certainty dominates our lives in late capitalist modernity: the price. Not a single day passes without learning, making, and taking it. Yet despite prices' widespread presence around us, we do not to know much about them. Economists, regardless of the corrective intervention of instutionalists like North and his followers, described markets as price making contexts, and then explained prices as things that are made in markets (North 1977; Robinson 1980). This circularity was shortcut in many ways by sociologists and anthropologists who made visible the social and cultural nature of prices (Robinson 1980; Zelizer 1981; Alexander and Alexander 1991; Zafirovski 2000; Geismar 2001; Velthuis 2003; Zajac and Westphal 2004; Velthuis 2005). Inspired by Polanyi's work and frequently drawing on one of his central concepts, i.e., "embeddedness", researchers argued that prices are culturally constructed amid relations of power in socially and politically embedded markets (White 1981; Granovetter 1985; Fligstein 1996; DiMaggio and Louch 1998; Dobbin 2004; Duina 2004; Lapavitsas 2004; Uzzi and Lancaster 2004). One cannot disagree. Currently, however, we are facing a more demanding challenge. We have to understand the material processes where prices are made and the rich world of prices that define the processes of market making.

To give an example, we can show, not with great difficulty, that stock or commodity prices are culturally and socially embedded, constructed or informed. Despite common assumptions, economists do not necessarily challenge this conclusion.[1] One cannot locate a market device that is technological enough to avoid social interaction. Calling prices social or cultural via a form of embeddedness argument, although an important first step to leave the reductionist logic of neo-classical orthodoxy, does not essentially help us locate the rich nature of prices, the multiple forms that they take and the manifold locations where they are produced even in a single local or regional market.

Recently, exciting new research in economic and social anthropology has begun to cross the boundary that embeddedness sociology defined. Instead of locating a world of interaction between the social, the cultural, the political and the economic, and then showing how they are embedded like Venn diagrams, researchers began to focus on

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[1] For a review of how economists see the cultural and social aspects of prices and markets see (Bakshi and Chen 1996). For a review of price theories in economics see (Brems 1991).

markets as socio-technical universes from the vantage point of price making (Callon 1998; Muniesa 2000; Maurer 2002; Caliskan 2003; Muniesa 2003; Chiffoleau and Laporte 2004; Cochoy 2004; Grandclément 2004; Levin 2004; Barrey 2006; Beunza, Hardie et al. 2006).[2]

This paper contributes to the new literature concerning the anthropology of price by focusing on processes and types of price making in a regional cotton market in Turkey, the Izmir Mercantile Exchange (IME). Describing how a variety of prices are produced in multiple locations of a single commodity market, I argue that the market prices of cotton at IME can best be seen as devices produced and deployed by traders to pursue their trading objectives. These devices turn cotton into a calculable and exchangeable entity whose value can be negotiated during various forms of bargaining.[3]

The cotton is priced in three forms at IME: *Rehearsal Price, Transaction Price* and *the Market Price*. These price forms are produced in four temporally and spatially specific places of the market: *the Pit*, *Post-Pit Trading*, *Closing Price Committee Meeting* and *Permanent Working Group on Cotton Meetings*. Drawing on an ethnography of the production of market price, the paper argues that prices can best be seen as prosthetic devices deployed to further various trading objectives. As we will see, instead of "setting the price," traders produce various price forms to prevent or foster exchange. Prices are never set by a mere coming together of supply and demand. They are made, produced, and challenged by a multiplicity of actors in a market process. This paper illustrates the making of a rich universe of price. Some prices are produced to perform exchange for a limited time period, and still some are produced not to be used for exchange at all. Aiming at mapping the geography of prices, the paper presents an ethnography of cotton trading in Izmir from the vantage point of price making.

A Summary of Trading Activities at IME

The Cotton Trading Pit of IME has historically been one of the important nodes of world cotton trade. Being the first and largest commodity exchange of the Ottoman Empire and then its successor, the Turkish Republic, IME's *Korbey*, as the cotton pit is called in Izmir, hosts the trading of thirty-five percent of lint cotton in the country.[4]

Every weekday at around 11:30, traders, brokers, spinners, ginners and their representatives begin to enter the exchange building. As they tour around the trading pit, trying to read the market, the trader population reaches one hundred to one hundred and twenty. Strolling around the pit, traders observe their colleagues' bodies and how they act, to locate subtle traces of weakness or strength, self-confidence or insecurity, alarm or tranquility.[5]

The pit is located in the grand cotton trading hall of IME. Located in the second floor of the exchange building, the hall is home to small trader offices surrounding the space. The pit, resembling two small amphitheatres standing very closely across from

[2] For an exciting set of new work in the anthropology of the market that came out recently see (Bestor 2001; Mitchell 2002; Preda 2002; Maurer 2003; Miyazaki 2003; Cetina and Bruegger 2004; MacKenzie 2004; Riles 2004; Yükseker 2004; Callon and Muniesa 2005; Elyachar 2005; Lépinay and Hertz 2005; Millo, Muniesa et al. 2005; Ong and Collier 2005; Roitman 2005; Zaloom 2006).
[3] For a more comprehensive discussion of how prices are made in global, regional and local market contexts and a theoretical account of their interaction see (Caliskan 2005).
[4] For the history of the exchange see (Yetkin and Serçe 1998).
[5] For ethnographies of trader performances in other markets see (Hertz 1998; Lépinay 2003; Beunza and Stark 2004; Levin 2004; Elyachar 2005; Knorr-Cetina and Preda 2005; Zaloom 2006).

each other, has the capacity to seat approximately one hundred and twenty people. All traders wear an identification card before entering the pit, which has fixed seats for all who have the right to enter. The rest must stay outside of the pit, but not of the market.

The pit has two entrances opening to its center. An IME employee sits at the center. He is responsible for registering sales and documenting bargaining and exchange. Four circular rows of seats, each becoming higher and longer as one moves towards the outer limit of the pit, help traders, observers and officials, sitting shoulder to shoulder, see and hear each other without difficulty.

Trading opens at 12:20 as an IME employee invites the traders to enter the pit and take their seats. This call takes place as traders walk around the pit or wait in the lobby right outside of the hall. It requires a few calls for all traders to take their place, because being too willing to take one's seat in the pit is a sign of emergency. Traders drag their feet a bit before entering and taking their predetermined seat. Being too eager to demand or supply affects the price so directly that no trader can risk looking like someone with an urgent need to sell or buy.

Ten minutes after it opens, pit trading terminates exactly at 12:30. Following an open out-cry system, bid and offer cry-outs frame trading in terms of four dimensions. First they specify the amount of cotton in terms of truck loads. Each truck is expected to carry approximately ten metric tons of ginned cotton; however the amount can exceed ten tons depending on the relative size of the truck.[6] Second, the offer locates the quality of cotton by specifying its standard and original location of production such as "Standart 1," "Garanti," and "Bergama."[7] Third, the offer includes a specific price in Turkish Liras for each kilogram of cotton. Finally, the offer specifies the payment terms such as "in advance," "in one week," or "in two weeks." The acceptance of the cry-out is indicated by saying "write." The word in the pit is a bond enforced not only by rules and regulations of IME but also by peer pressure. It is unlikely that a trader can change his or her mind after accepting the bid.[8]

At 12:30, with the ringing of a bell, trading in the pit terminates. In an interesting contrast to the slowness of traders in entering the pit, they leave it rapidly. In these ten minutes of encounter between demand and supply, individual dyadic prices are made. However, the end of pit trading is not the end of trading at IME. Trading continues after 12:30 until 1:15. For forty-five minutes more, traders walk up and down in the area between the pit and their booths, making comments, jokes, bids and offers as they pass by each other, while constantly holding their cell phones in their palms, connecting them to their clients. After 1:15, trading can be carried out, but rarely is. Prices made after 1:15 are not considered as representative of the day's prices.

After 1:15, the Closing Price Committee, consisting of leading buyers and sellers, exchange brokers and merchants, comes together. Following deliberation and study of all registered transactions in and outside of the pit, the committee writes a price report. This document establishes the closing price of the market and turnover of the day, to be closely watched by other traders around the world.

Rehearsal Price of the Pit

[6] If the offer is well more than a few trucks, it is specified in terms of metric tones.

[7] For more information regarding Turkish Cotton Standards see (Gencer, Özmeriç et al. 1999).

[8] However, one can stretch a bid a bit if the accepted offer turns out to be worse than the market price that would be set later in the trading day. In these situations, payment terms can be relaxed a bit in an informal manner.

Taking a closer look at these various price forms and how they are produced in multiple locations of trading requires us to open the black-box of the market as we follow the making of its prices. But, how, where and when to locate the market and the price?

The official publications of IME follow a neo-classical logic: “The price is made in the immediate universe of the pit that provides traders the necessary platform for demand and supply to come together and resolve into a market price” (IME n.d.). These documents refer to the exchange as an “institutionalized market place” based on five pillars: the commodity, the seller, the buyer, the legal structure and the organization of the exchange (IME n.d.). “The objective of mercantile exchanges is to create all the necessary conditions to achieve free competition, in other words, to make the laws of supply and demand work. It is in this way that mercantile exchanges come quite close to being ideal free markets” (IME n.d., 18). It is as a result of this “almost ideal market setting” that it becomes possible for commodities to be traded at their “real values” (IME n.d., 18).

Traders agree with the way their organization sees its functions. “Here is the market,” whispered an experienced exchange broker to my ear, while he and I were sitting in the pit. It was the first day of my field work. Trading had started a few minutes ago, after the exchange officer, with a cordless microphone in his hand, invited the traders to the pit at least three times. I looked around and saw people looking around, yet unlike me, seeing a universe of encounter almost invisible to the naked eye. I have read all the rules and regulations of the exchange and even conducted a few preliminary interviews about the everyday workings of the exchange. To say the least, I was not among the least informed visitors of the cotton hall, yet it took for a while for me to realize that traders were actually trading. After an exchange broker cried-out “write,” I leaned towards my host and asked, “what happened?” “I’ll explain it to you later” replied my host.

The ten minutes passed rapidly for me, at a snail's pace for my host. With the ringing of the hall’s bell, traders emptied the pit quickly. The sales officer of TARIS (the Unions of Agricultural Co-Operatives for the Sales of Figs, Raisin, Cotton, Olive and Olive Oil), representing the largest seller of the market, was the fastest to leave. He was followed by five other agents some of whom chased TARIS representative.

I left the pit with my host and began watching him show a potential client the cotton samples he kept in his booth. Another trader came to the booth, entered it and began to directly listen to what they were discussing. I could see others looking at my host, his potential customer, and the other agent who was listening to them. I stepped outside to the then almost empty pit and decided to take a look at the electronic board where the world prices of cotton were projected, just to keep myself busy as I felt out of place in the market, the object of my research.

A waiter interrupted my “studying” of the world prices. He handed me a cup of tea, sent by another exchange agent. I looked around to spot him, and caught his gaze, accepting my gesture of thanks by gently moving his head up and down. I stood there, right in between the pit and the booths surrounding it, having sips from my cup and trying to register what was going on in the market. It was going to take close to one hundred formal and informal interviews and three months of observation for me to begin to appreciate what “here is the market” meant for the cotton traders of IME.

“This is the market,” said another exchange agent two months after that first day in the pit. He was the oldest and perhaps most respected trader at IME. He had been active in export markets all of his life until 1987, when Turkey became a net cotton importer for the first time in history. “Gin owners, speculators, exporters, importers… Everyone is here. Buyers and sellers call them, ask what the market is. They say, buy me two trucks of this and that” he continued, showing me the traders around us with his hand holding a constantly ringing cell phone, set to Mozart’s Rondò Alla Turca.

Thinking that he had spent enough time keeping the caller waiting, he apologized and took the call while shielding his lips with his right hand, a common gesture to prevent others from understanding what he says. After a few seconds, he hung up the phone and continued:

- Here, everything depends on trust. Once you say ‘write,’ it is written on the board. Once it is written, the deal is cut, the market is made. Your word is your bond. You cannot say later that you misunderstood this or that. People would laugh at you. You lose your reputation. You are not taken seriously. The hall is made of one hundred and ten years of trust, institutionalized around this pit.
- But not all trade is carried out in the pit.
- Yes the pit is only the beginning. It sets the stage. But even before the pit trading starts, things begin to happen in the hall, the market begins to appear. We observe each other before the pit. We want to learn the level of refused cotton.[9] We probe the market by reading other brokers’ faces, the way they talk on the phone, they way they approach each other. This doesn’t take a long time if you are experienced enough. I have been working here for decades. So it is very easy for me.
- The pit?
- Yes, then, we enter the pit. We make more deals outside of the pit. But it is the pit that makes this possible. You sit and look around, traders start making offers and bids. I sell this, I buy this. Depending on the price, you make your decision and if you are buying, you say, for example, write me a truck.

The everyday performance of trading both in and around the pit is crucial for pricing cotton. On the one hand it would be misleading to argue that it is only these performances that structure price levels, yet on the other hand it would also be problematic to argue that it is the unmediated workings of supply and demand that make the price. Because the levels of supply and demand should be located by various market agents for supply and demand levels to have any effect of the market. “Market forces” have to be perceived and processed by traders. The making of supply and demand is not independent of traders’ perceptions of them, and it is only through institutionalized filters and deliberations that their effects are felt by market agents. It is also through speech acts and conscious and unconscious bodily performances that the invisible hands of markets are located by traders. These performances are central for the everyday working of trading pits.

Another exchange broker explained the working of the pit and its role in bringing together supply and demand of cotton by using analogies and rhetorical

[9] Refused cotton is the commodity whose quality is contested. Buyers can refuse to accept the cotton sent to them if they are not sure about the quality until an arbitrator of IME solves the problem.

questions that depict, in his own words, how the way market forces of supply and demand are mediated in trading floors on the ground.

- The pit makes sure that demand and supply meet each other in a disciplined way. And it is by the pit that the exchange carries out this intermediary role. The supply and demand are made there. So, the pit is an instrument for the exchange. How does a carpenter work? With a saw. How does an exchange make supply and demand? With the pit. So the pit is the tool for making a market. Where is Shakespeare's Hamlet played in Izmir? It is played in theatre. The pit is the theatre of the market.
- It seems to me that there is more than crying out 'I sell this,' 'I buy this' or 'write.'
- The pit is a performance place. Traders and brokers are in a situation like that of poker players. Traders know that when they sit in the pit, their facial expressions, the way they talk and the way they don't talk, the time they enter the discussion and when they don't, everything they do and not do are crucial. Imagine that your client calls you and orders you to buy twenty tons of cotton on that day's price. You know that you have to buy or else the factory will stop. What happens when others also know that? You can't be selling at a price lower than the market price. But you don't know the market price. What if the market price turns out to be lower than the one you took? You can do it once, do it twice, and then you lose your customer. We have to catch the market price and if possible make it. We'll do everything to make the price. We'll look like we don't want cotton, we'll pretend that we're not interested; we would probe others and watch what they do. We have to do this as if we are not doing this. Yet however cool you are, your body … reveals what is going on inside. This is how we read each other and decide what to do.

Trading performances have their own limits. On the one hand they are effective ways of bargaining that are used frequently, yet on the other hand their effect depends on one's market position and power in the pit. Traders are aware of their colleagues' market power in terms of the volume they buy and sell. What they do not know is when they take these positions. If a trader over-performs in the pit, without necessary means of supporting his performance, he usually fails to meet the market price. One exchange broker made this mistake of over-performance and made a deal without probing the market effectively. It was the first time he spoke in the pit since I started observing traders in the cotton hall. Another broker, whose market position was one of the largest in IME, explained what happened that day when I met him in his office.

> It is not possible for everyone to make the price at IME. It requires a strong heart. It requires courage. It requires experience. Our job here is to create stability. We are responsible to those who trust us. This is the spirit that informs us in the pit. But some people make too many zigzags. There are two different groups in the exchange. The first group just talks in the pit for satisfaction. Does this, does that…I mean like a real actor. We all have the same gun, but different amount of bullets. We all know

> how much ammunition we all have. For example, today one man wanted to buy. Of course we didn't sell. I don't let others make the price. I make it. What happened to this man? He bought the same cotton spot cash, but others bought it on credit. We all know each other. If you follow what is going on in the hall before the pit starts, you can make the price. Not many people can make it. I would say only five to ten people are really good at what they do. Their power relies on their experience and the firms they represent.

The limits of performance in trading and the effect of performative acts in making prices are related to the performer's market power. Those who observe these performances in the pit always perceive them with reference to the performer's market position and the firms he represents. That is why when these "five to ten people" come to the pit, the whole atmosphere changes. Moreover, when one of them does not come and join the session that day, the pit is even more affected.

According to another exchange broker, whose absence moves things in the pit, observing individual traders is enough to probe the market. For him, the way individual traders behave and feel that day creates a synergic whole, a specific air, or *hava,* as he calls it in Turkish. To him, traders affect each other and also interact in a rather unconscious way to produce a combined effect that cannot be observed by looking at individual traders only. The market has to be "smelled."

> Once you enter the pit, you are all ears and eyes. What one really has to do is to smell the air in the pit to locate the supply and demand of the day. Traders may be talking to you, but at the same time watching what is behind you. Before going to the exchange, I always make a research and study the market. You can't make the price if you don't study it. I make projections, and relying on them I observe traders and smell the air in the pit. If the business is hot, I can read it in advance. I read the market's pulse. In our exchange, traders make many beautiful maneuvers. For example, if I don't go to the pit, if they don't see me there, they know what it means.

Whether they smell the air, made up of a synergic whole traders co-create, probe the market by carefully registering how others act before and during the pit session, or perform in a way to cloak one's intentions so that it may be possible to have a better bargaining position, traders rely on various forms of bargaining to affect other's perceptions.

Trading performances in the pit have immediate effects, visible only after the session terminates. According to a broker who has had a seat in the pit for at least two decades, "the pit is nothing compared to what happens afterwards. The pit is the trial run on the market. You try to make it there and then got your deal later. For every deal cut in the pit, there are three deals outside of it." His rather conservative estimate was challenged by another trader a few days later:

> The pit is a total show. It is not the market where the prices are made. They are made later. I'd say only ten percent of trade takes place during the ten minutes of the pit session. Brokers and traders try to fix a price

> there so that they can make money later. For example they would say 1.60 in the pit, but sell later for 1.50.[10]

If the pit is "nothing" compared to "what happens later," and if the pit is only a fraction of later trading, what then makes it the place of the market for traders? One immediate answer is that it is through the temporal and spatial framing of the way supply and demand meet each other that it becomes possible to engage with the market. It is the pit that brings them together and helps buyers and sellers meet each other. Otherwise, the market would be "everywhere" and could not be effectively engaged. Although partially valid, this answer cannot take into account the fact that the vast majority of trading takes place outside of the pit, both temporally and spatially.

Instead of seeing it as the market's place, a better answer would locate the pit as a design of intervention in the making of the market. It is misleading to assume that there is only one boundary between the market and the non-market. Markets have multiple boundaries even in their immediate universes like that of the IME. In other words, markets have various places with various price forms even in a single geography of trading.

However, one has to be careful when using geographical analogies to make these different market "places" visible, for these boundaries are not only spatial but also temporal. The cotton market at IME has multiple locations, strategically separated by temporal and spatial limits.

Traders, when they are in the pit, perform and watch performances to weigh their validity. By and large, the pit is a preparation for the post-pit trading that takes place before 1:15. Working to produce a price in the pit is a performative investment. These pit prices will very soon be referred to in making deals during post-pit trading. By quoting the prices made during the pit, traders discuss strategies with their clients and then readjust them according to the price levels of the day. It prepares the ground for marketing by marketing cotton itself, though in smaller amounts.

It is important to note that many traders use theatrical analogies to describe their everyday experiences in the pit. It is either "a place that looks like a theater where Shakespeare is played" or just "a show" that "real actors" put together. Yet actual transaction prices are made in this "show."

This new form of price produced in the pit for post-pit trading presents an interesting puzzle: these prices are made to exchange cotton. They are actual transaction prices. However, they are also prosthetic prices. They are used as devices to affect post-pit trading that witnesses around ninety percent of actual trading at IME. As a result, this interesting price form is both an actual price and not. It is both a prosthetic price and not.

Drawing on traders' analogies, I call this price form *rehearsal price,* for it is caught in the middle of actual performance and non-performance – traders rehearse actual trading by using rehearsal prices. The volume that they trade as they rehearse trading is only a fraction of the trading that takes place after the pit. The price produced during pit trading is a rehearsal price also because it is produced to probe and to make the market. The rationale of its production is not to make a transaction, but to affect the process that will make the post-pit trading price. However, these rehearsal prices are

[10] When I carried my field work in 2002, Turkey was using Turkish Lira. In 2005 the government introduced the New Turkish Lira (YTL) erasing six zeros from the TL. The prices I use in the paper are converted to YTL.

also transaction prices because it is by taking them that cotton is exchanged. For the price to be rehearsed, it has to be taken by a trader. As soon as one hears the cry-out "write!" a rehearsal price is produced. In a given session of pit trading, depending on the season and the volume of the market, tens of different rehearsal prices can appear. All of these prices are used as devices that enable traders to strategize their trading moves during the post-pit session. In the next section we will see how rehearsal prices play a significant role in post-pit trading by discussing an empirical example.

What happens when no trade takes place during the pit session? This means that no rehearsal price is made. But traders still produce a form of price rehearsal by making bids and offers that are not taken.[11] The absence of rehearsal prices does not indicate that no rehearsal has taken place. A rather explicitly displayed disinterest may actually be indicative of an urgent interest.

Transaction Price of Post-Pit Trading

After the pit session is called off at 12:30, traders leave the pit and either go back to their booths or begin walking in the circular quarter between the pit and their office cubicles. Immediately after the pit, they call their clients to reconsider their trading decisions depending on their ideas about the rehearsal prices. If they are representing buyers, they would do their best to buy cotton in terms better than those that are made during pit trading. Their dilemma is that those who are representing the sellers are motivated by the opposite objective. Sellers try to take a price a bit more than the rehearsed prices in the pit. When they rehearse prices then, buyers always try to pull them down, whereas sellers try to make them appear high.

The centrality of rehearsal prices in the making of markets becomes more visible during post-pit trading. Bargaining always takes place with reference to rehearsal prices, either by taking them seriously, or by looking down upon their importance, depending on one's market position. The following instance of bargaining that took place between two exchange brokers, witnessed by at least four other traders and me, presents a case that exemplifies both technologies:

A: So you say 1.60?
B: You heard it. You know the cotton.
A: It is high. You know C. sold it for 1.55 a few minutes ago.
B: Why don't go buy from him then. But who buys his own cotton, eh?
A: Ok, ok, 1.60 it is, payment in a week. Shall I call the factory?
B: Go ahead.

In this round of bargaining, the rehearsal price played a major role in two respects. First, the buyer mentioned it to make the point that the sellers' price is higher than what was taken a few minutes ago in the pit. Indeed, a few minutes ago one truck of Bergama was sold for 1.55. This was a rehearsal price made to be used later. However the seller recognized the power of rehearsal price only to a certain extent. B accepted the fact that the bargaining had to be around 1.55, yet he alluded that the rehearsal price was made to

[11] It would be a tautology to say "nothing happened in the pit today," because even if nobody makes a bid or offer during pit session, a very infrequent situation, it still means something valuable for traders.

depress the actual prices that will take place after the pit session. The question "who buys his own cotton?" was meant to decrease the power of the rehearsal price by rhetorically underlying the fact that the price was made as an investment for later use to structure the possible range of prices in post-pit trading. He suggested that the rehearsal price was "rehearsed" between two traders who work for different companies but buy and sell for the same yarn producer.

Immediately after the rehearsal price was itself challenged by the seller, the buyer, who already was willing to pay up to 1.625 for the same cotton, made the deal. His client's factory needed cotton. Being very experienced and strong, --one of the "five to ten people who knows how to make the price," he managed to buy for less than what he had anticipated. The trade was a success. For the seller however, the trade was not a success, if not a big failure. He had to sell immediately, for the ginning factory that owned the cotton needed cash soon, so they ordered him to sell for as high as possible, yet no cheaper than 1.60.

I interviewed both A and B after this round of exchange took place. A, who had successfully bought for less than he expected, let me know the range his client had given him. Immediately before the trade had taken place, during the pit trading, A had looked terribly disinterested. B, a broker representing relatively less powerful clients, had to sell. He did not skillfully cloak his feeling of urgency. He was still a bit upset for having sold the cotton at his lower limit. It was A's power, his performance's strength that put together a well rehearsed price.

The first boundary of the market, i.e., located between the pit and the post pit and demarcated by time (12:30 p.m.) and space (the outer circle of the pit), held together and made possible trading performances that produced the rehearsal price. Once the first boundary was crossed, transaction prices are made during various sessions of bargaining. As these sessions take place, the forces of demand and supply are performed, registered, contested and perceived differently by traders who have diverse market positions, information, orders and thus performances. These technologies of mediation, interpretation, translation and performance structure the effects of supply and demand on the ground. Without the mediation of these technologies' deployment, supply and demand are nothing but ineffective abstractions.

The trading during post-pit session has a huge volume. The rehearsal prices, as prosthetic devices, are used extensively during post-pit trading. This second market place hosts the great majority of trading in IME. Hundreds of truck loads of cotton are sold and bought, producing hundreds of transaction prices, some higher and some lower than the rehearsal price.

Crossing the boundary between pit and post-pit trading also makes it possible for buyers and sellers, represented by brokers, to meet each other individually and make individual dyadic prices. They utilize the prices made or rehearsed during the pit session and center their trading and bargaining strategies on these prices. One main difference between pit and post-pit trading is that trading in the pit is an individually performed and publicly observed act. After the pit however, trading can still be observed by others, yet to a limited extent. Traders' individual encounters are scattered. Their place in the market is not fixed as in the pit; they move in it, literally by walking up and down in the space between the pit and the walls of the mercantile exchange building.

Another central difference between these two locations of the market concerns the visibility and registration of trading. All trades in the pit are registered as soon as a deal is cut by saying "write!" This literally means that the trade is registered and the names of the buyer and seller, the quantity of the sale, the price and the payment conditions are written down. All sales are visible in the pit. Because of both the level of visibility and the requirement of pit trading, traders cannot always choose their trading partners, for anyone who says "write" can take the bid or offer.[12] Yet in post-pit trading, traders have more freedom to choose their trading counterparts. This is crucial because, according to cotton traders no two offers, that have exactly the same amount, price, payment conditions, are the same. The trading records of sellers and buyers always play an important role in making a deal. Traders tend to choose bids or offers made by a relatively more trusted trader. For this reason, traders may choose not to reveal their deals in post-pit trading, where deals are not necessarily visible. Traders may also choose not to reveal their sales for it may let others better know their trading policies and put them in better position in the near future to guess others' moves in the market.

Making of the Market Price of Turkish Cotton

These various rounds of post-pit bargaining, drawing on rehearsal prices and carried out in dyadic form, continue for another forty-five minutes and end as traders begin to leave the cotton hall around 1:00. Many registered and unregistered trades take place in the market during these sessions. Although it is illegal to carry out an unregistered transaction, it is performed frequently, for the hands of the market can indeed be invisible if wanted. But it is not possible to render the market price invisible. Just before the trading day ends, one crucial market activity remains to be carried out. Members of the Closing Price Committee come together at 1:15 to locate the market price of cotton.

Market price is a price form that is shaped by the deliberation among the members of this committee. Without it, dyadic relations of exchange that take place in a scattered manner in time and space could not be brought together. It is this interception of the market process that makes it possible for the market price to appear. Because it entails a daily routine of deliberation and yet another form of bargaining, by definition it connects market positions to power, usually by mirroring power relations on the market. The committee members have historically consisted of large traders and a few smaller sales brokers who are included to present an image of equality. Deliberation goes on without disagreement especially when market activity is low. Yet when the trading volume rises, it becomes more difficult to locate the price.

The first difficulty consists of linking the rehearsal price of the pit with the transaction price of the post-pit. Market agents know that rehearsal prices are simultaneously prosthetic devices used to shape future bargains and transaction prices that are taken to buy or sell cotton. By definition, these rehearsal prices are made to appear lower or higher than acceptable levels to be able to trade in desired future prices. The actual, yet scattered prices of the post-pit trading however are not rehearsal prices; they are not made as investment to be appropriated for future use. Yet they draw on rehearsal prices and it is only with reference to them that it becomes possible to make these transaction prices. When the number of rehearsal and actual prices increases, the range within which they oscillate gets wider. In these situations, it becomes more difficult and strategically important to locate a market price that represents these different trading levels.

[12] However, it is possible to make a bid or offer to a specific market agent by directly spelling out his name, but this is a rather rare occurrence in the pit. I'd like to thank Hayri Özmeriç, a trader from IME, for correcting me on this point.

The second difficulty of locating the market price arises because post-pit trading provides traders, to a certain extent, with an invisible ground of interaction. They do not have to register their trades. Legally, all trades have to be registered but in practice there are many ways of not registering a deal either immediately or after the deal or even never.

The committee follows a few rules of thumb to establish a range of representative transaction prices and trading levels. Only registered prices are taken into account. Traders may make a deal in the cotton hall after the pit trading and still keep it private. These unregistered deals are not taken into account in locating the price of cotton. Because one cannot know for sure the level of invisible trading, since it cannot be documented and thus made visible, it may be misleading to post prices depending on not yet posted transaction prices. This challenge does not make the Closing Price Committee helpless in filtering out possible tactics of manipulation. For example, when a seller and buyer representing the same company or brokerage house make a registered deal, their trade and price are filtered out from consideration.

The market price is usually set by looking at transaction price levels that do not vary greatly: rehearsal prices always set a range of bargaining before transaction prices are taken. Yet sometimes, especially when the trading volume increases, it becomes more difficult and contentious to set the market price. In these situations deliberation takes more time and another round of bargaining takes place, affected on a daily basis by the market power and positions of the traders. To give an example, one day in 2003, after one market price announcement, TARIS, the cooperative representing cotton farmers, protested the committee, did not recognize its decision and asked the IME Board to include the Coop's member to the committee. It did not take long for the IME to include TARIS in the committee, and since then the committee is regarded as more representative of the market players.

The committee's coming together helps us locate yet another market place in the halls of IME. Now all trading has been carried out, the prices have been rehearsed and then realized during various rounds of transaction. This third location of the market, spatially still located in the cotton hall of IME, yet temporarily located "outside" of marketing, is the place where *the market price* is produced. It is crucial at this point to make note of the fact that in order for the markets to produce a price, market participants should leave the immediate location of marketing and recreate another one by using social technologies drawing on arbitration and deliberation. It is in this third location of the market that the market price of Turkish cotton traded in Izmir is set. It is also this market price that other cotton traders and market analysts around the world take into account as they carry out their daily routine of trading and research.

Another Market Place: Permanent Working Group on Cotton

These three temporal and spatial places of the market, the pit, the post-pit, and Closing Price Committee Meeting are not the only locations where prices in their multiple forms are made in Turkey. Over lunch in an upscale restaurant in Izmir an experienced cotton trader said, "Tomorrow, we'll determine the supply of this coming cotton season." Reaching for his beer slowly, he continued, "Everyone will be at IME tomorrow, the ministry, the cooperative, traders, and cotton research people. You can see the real market there." Learning the fourth *real* location of the market since I had started my urban field work ten weeks ago, I asked:

- What do you mean by determining the supply?
- I studied economics. It is true that supply and demand come together to make the price. This is what takes place at IME. But before it happens, we have to discuss its amount and fix it somehow.
- Before what happens?
- You know. The supply. What you see in the market depends on what you want from it. I cannot accept a declining production figure before the new season starts. If it declines, if I, as a trader, say that it is going to decline, the price will go up, so I'll sell less cotton. So I have to find more capital for turn-over, and make less money. So we do our best to present a higher supply figure.

The next day after post-pit trading ended and Closing Price Committee decided on the market price of Aegean cotton and posted it, not all traders left the IME for their offices or warehouses. Some went to IME's historical conference room to join the meeting of the Permanent Working Group on Cotton, a gathering described by the above trader as another "real market place." This new market place was comprised of the Ministry of Agriculture bureaucrats, traders, economists, agricultural engineers, a few large landowners and the officials of TARIS, the cotton sales cooperative representing farmers producing more than a quarter of the crop in the country.

Coming back from lunch with a sales broker, I entered the conference hall and sat with a few traders and one ginning factory owner from Söke, whose plain is the second largest cotton growing land in Turkey. A bit worried that I had missed the first ten minutes of the meeting, I leaned towards the ginning factory owner I had interviewed during my rural fieldwork and asked whether I had missed anything. "Nothing." he replied, dismissing the importance of these first ten minutes, "Regular stuff, welcoming, underlining the importance of cotton for the country and using scientific techniques to develop the cotton sector, etc. The real stuff is yet to start."

Indeed it was. Nazilli Cotton Research Institute's director ended his opening remarks by commenting on the importance of the Committee for the Turkish cotton sector. Moving his eyes from the text he was reading, looking at his audience in a recognizably more serious way, he closed his speech by saying, "We have to be very careful in estimating the supply levels, for they will affect cotton prices greatly. So we have to discuss the matter very seriously and reach a decision that represents the interests of the cotton sector the best."

This was not an easy objective. There were three main groups in the meeting, with three diverse sets of motivation prefiguring their approach to cotton supply estimates. Traders, merchants and brokers comprised the first group who had an interest in depressed prices, because lower prices would make it possible for them to trade larger volumes. As a result they would do their best to prevent the caucus from producing an underestimated production level, for a forecast of decreasing supply would push the prices up.

The large landlord and the cooperative representatives had the reverse motivation. Obviously, they would benefit more from increasing prices. Thus they had an incentive to prevent the overestimation of the production level, for guessing a higher supply would depress prices.

The ministerial representatives, however, did not care for the price levels as much as the previous two groups. Their main purpose was to note the cotton supply levels as accurately as possible in order to inform the minister of agriculture so that he could ask for an accurate amount for agricultural subsidies from the annual budget of the prime ministry. A lower estimate would result in a deficit in his budget. A higher estimate would make the ministry look unsuccessful.

It did not take long for these three positions to gain visibility in the meeting. After the cooperative representative presented his production estimates for the 2002 crop, estimating that there would be a considerable decrease in production, traders, merchants and the ginning factory owner sitting next to me simultaneously began to fidget and shift their body weight from side to side in a rather uncomfortable manner, displaying obvious movements of disagreement. A few went even further and voiced their disagreement by making loud noises of discontent and flying their hands over their heads as if trying to get rid of a fly.

Merchants and brokers, however, did not present a figure of their own. Although the research department of the exchange had been working on estimates of some sort, they were understaffed and lacked required funds for carrying out a regular survey. There was an ongoing project on monitoring production levels by using satellite remote sensing imagery, yet it was not yet deployed effectively.

After a long and heated deliberation, the caucus reached a consensus that made everyone unhappy, but content. The estimated cotton supply was pinpointed as lower then the previous season. But it was determined to be higher than the cooperative's estimates and lower then most of the individual traders' guesses.

Cotton supply was not only a function of its production but also a matter of everyday market politics. This is why the traders who invited me to this meeting thought that it was another location of the market, for the very processes of price making were also intercepted in meetings like that of Permanent Working Group on Cotton, whose decisions inform trading decision and thus the very making of the price in all its three forms.

Yet a mood of consensus disappeared quickly when the next item in the agenda was introduced –the production cost of cotton, making the differences in the way things are seen even more observable. After a rather lengthy presentation on the techniques of estimation and data gathering, the Cotton Research Institute representative finally revealed the Institute's estimate of cotton's production cost: 1.10. This estimate created such an uproar that for a good ten seconds nothing but chaos ruled the meeting hall. A ginning factory owner, whose main occupation was to fund indebted farmers to secure an annual supply of cotton to his enterprises and then sell his cotton at IME through his agent sitting close to him that day, told me in a quite irritated manner, "This is a lie. A straight lie! What kind of a cost is this? Even if one gives two liras to the peasant, he would say 'oh I go bust.' It is their nature. It is a lie. The cost is not more than 0.40. I myself am a farmer. I know it."

Both his and others' anger somewhat calmed down as the speaker stepped down from the podium and the meeting's attention turned toward the cooperative's representative. His estimates dragged the institute's figure down, yet still not enough for the merchants, I thought observing the uneasiness of their attendance to the speaker's presentation. The large landlord's estimate of 0.60, however pulled the production cost estimate even lower, injecting into the meeting a rather peaceful ambiance.

The cost of production was important for the making of prices yet in a rather indirect manner compared to the role of supply estimates. A high cost estimate would fuel farmer and cooperative grievances. Furthermore it would make historically low cotton prices look even worse. Finally, a higher cost estimate would also contribute support to the negative public image of brokers, merchants and traders. From the government's side however, a higher cost estimate would corner them, giving the opposition parties ammunition to criticize them for not extending enough support to the farmers.

The institute's calculations of the cost of production treated farmers as workers with a forty hour work week, enjoying national and weekend holidays and earning a minimum wage. In short, the institute estimate calculated all costs by attaching a monetary value to them following the standards the Ministry of Labor and Social Security set for all workers. Yet the mercantile opposition was fierce enough both to silence the institute director and to force the caucus not to consider the institute's estimate, taking it out from the arithmetic average calculated by adding the landlord's, the cooperatives and the exchange's estimates and then dividing them by three. An arithmetical formula helped the three parties reach a consensus.

The cost of production estimate, like that of the supply, was again "determined" as the ginning factory owner told me over the lunch, in a new place of the market, where the forces of supply are negotiated and the cost of production is calculated within a context informed by various interests crossing class, status and scientific boundaries. Furthermore, the Ministry of Agriculture's representatives remained silent, thus preferring the registry of lower estimates. They were aware of their limited power in economic decisions because of the stand-by agreements the government had made with the International Monetary Fund. They also knew that they would be criticized harshly if a high, yet more accurate, cost estimate was published.

Meetings such as that of the Permanent Working Group on Cotton are peculiar locations of the market that are rarely considered to be market places. However, it is in these meetings that the very building blocks of markets, supply and demand, begin to take shape. The coming together of supply and demand is probed, prefigured and even produced as estimates by a caucus representing all market actors. The making of rehearsal prices, transaction prices and market prices is directly affected by this last location of the market. That is why the very meeting itself should be seen as a market activity as central as trading itself, thus making the Permanent Working Group on Cotton meeting a new market place where various prices are made.

Conclusion

Exchanging of cotton takes place in the various locations of the market. The institutionalized universe of the market is demarcated by multiple boundaries. Pit trading, the point of entry to the study of cotton trading in Izmir, was framed in temporal and geographical limits, bringing traders together for ten minutes between 12:20 and 12:30.

It is in this temporal and spatial location that "the theatre of the market" takes place. Market players located in that theatre produces *rehearsal prices*, a heterodox form of price caught in the middle of indicative and transaction prices. It is taken to exchange cotton, yet it is made to exchange only a very limited quantity of the commodity, making it a rehearsal for the actual volume of trade that has yet to be reached during post-pit trading. The pit price is a market device deployed and produced by merchants to strengthen their hands as they make actual transaction prices. The rehearsal price is a device because its making is a simultaneous investment for post-pit trading, yet it is an actual transaction price too, for the actual cotton is exchanged by its acceptance. This process of rehearsing the price during pit trading draws on various trading performances and represents the effects of perceived levels of the demand and supply of cotton.

Once this first boundary of the market is crossed, literally by leaving the pit at 12:30 sharp and by entering the second location of the market, the post-pit, traders begin to use these rehearsal prices to negotiate actual transaction prices. Post-pit trading, where traders are not brought together as closely as in the pit, produces actual transaction prices. However, both the traders and their prices are scattered in this second place of the market. Hundreds of registered and unregistered prices are made in this most vibrant location of the market. More arresting still, this is not the place where *the market price* emerges.

In the end of post-pit trading, the market price appears in a categorically different setting – in the Closing Price Committee meeting. Following a heated process of bargaining and haggling, the committee makes a decision on the market price of cotton as it is produced in Izmir. The committee members remove the highest and the lowest market prices from the list of prices they get from the IME administration, and take the weighed arithmetic average of individual transaction prices that are registered. The market price is born by using an arithmetical formula in a process of heated bargaining and discussion. The market price is not set by a mere coming together of demand and supply as the neo-classical price theory suggests, but is produced in a political process of deliberation. Studying a market and its prices is to study these processes.

Demand and supply also play their role, yet again in a surprising setting. Before their effects were perceived by the traders, supply and demand effects are negotiated in committees specifically formed for this task.[13] The actual demand and supply figures of any market are known after the market is made. As the market is made, one cannot know them for sure. It is misleading to deduce the price from the levels of supply and demand, for prices in their multiple forms are made *before* these levels are known. In meetings such as those convened by Permanent Working Group on Cotton, the perceptions of "what the market will be" are discussed and negotiated, and figures such as supply volume or costs of production are literally produced, thus further informing the ways in which prices are made as market devices. Regardless of what the actual cost of production and supply will be, the produced effect of their estimation is a product of a deliberative market process. The actual figures of supply and cost will be known, yet only after the cotton is consumed and thus disappears.

That is why it is more appropriate to see prices as prosthetic forms produced, deployed, resisted, and at times, abused by traders. Seeing the market price as a summary of a market activity is misleading, for every summary reflects the vantage point of its writer. Markets, as "theaters of exchange", draw on many stories informed by a diverse set of constraints and interests. So do prices. In Izmir, market prices are produced in three main forms in four different market places. Studying the market from the vantage point of the price, then, requires us to look at the very production of process of prices as market devices. Future research on the anthropology of prices as market devices has a great potential to provide us tools to forcefully address this pressing need.

[13] For an analysis how the perception of supply and demand contributes to the making of prices and exchange volumes see (Odirici and Corrado 2004).

Such an ethnographical attendance to price production also helps us approach markets as socio-technical contexts whose working can be studied and critically questioned in a novel way. Seen as prosthetic devices, it becomes impossible to see prices as a more or less neutral coming together of the forces of supply and demand. Making visible the very processes in which various price forms are produced can help those who are affected by these prices be more active in participating in the making of prices. Because, as we have seen in the discussion of the making of three prices forms at IME, markets are intervened and maintained constantly. This is their condition of possibility, not an exceptional state. If this is the case, *laissez-faire* acquires a new meaning, for letting them but not others produce the price, directly affects the livelihood of those who make and consume the very commodity, whose price is produced amid relations of power.

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